

**EAST Search History****EAST Search History (Prior Art)**

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
S1	2432	310/311.ccls.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/06/28 08:05
S2	2	"20060159295".pn.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/06/29 11:52
S3	2566	310/328.ccls.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/06/29 10:06
S4	642	310/324.ccls.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/06/28 11:42
S5	2049	310/322,334.ccls.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/06/28 12:39
S6	273028	piezo\$	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/06/29 10:07
S7	261478	speaker	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/06/29 10:07
S8	9951	S6 and S7	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/06/29 13:29

S9	457319	resonan\$	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/06/29 10:07
S10	2677	S8 and S9	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/06/29 10:07
S11	110944	resonan\$ with (different multiple plural plurality two second)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/06/29 10:08
S12	911	S8 and S11	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/06/29 10:08
S13	3503	S8 and (beam arm)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/06/29 11:52
S14	627	S8 and ((beam arm) with support\$3)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/06/29 11:53
S15	2145	S8 and diaphragm	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/06/29 13:29
S16	175	(piezo\$ near (lamine \$)) with (large)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/06/29 16:03
S17	746	(piezo\$ near (lamine \$1 stack\$2)) with (large \$1 increas\$3)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/06/29 16:04
S18	2647	310/328.ccls.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/12/30 16:53

S19	2508	310/311.ccls.	US_PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/12/30 16:53
S20	2086	310/322,334.ccls.	US_PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/12/30 16:53
S21	674	310/324.ccls.	US_PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/12/30 16:53
S22	285556	piezo\$	US_PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/12/30 17:59
S23	280153	speaker	US_PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/12/30 17:59
S24	10679	S22 and S23	US_PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/12/30 17:59
S25	2252	S24 and diaphragm	US_PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/12/30 17:59
S26	115407	resonan\$ with (different multiple plural plurality two second)	US_PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/12/30 17:59
S27	964	S24 and S26	US_PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/12/30 17:59
S28	666	S24 and ((beam arm) with support\$3)	US_PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/12/30 18:00

S29	808	(piezo\$ near (laminate \$1 stack\$2)) with (large \$1 increas\$3)	US_PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/12/30 18:00
S30	842	310/321.ccls.	US_PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/12/31 07:27
S31	1177	310/330,345.ccls.	US_PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/12/31 08:32
S32	2530	310/311.ccls.	US_PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2008/05/24 13:49
S33	2134	310/322,334.ccls.	US_PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2008/05/24 13:49
S34	2705	310/328.ccls.	US_PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2008/05/24 13:50
S35	847	310/321.ccls.	US_PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2008/05/24 13:50
S36	689	310/324.ccls.	US_PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2008/05/24 13:50
S37	296000	piezo\$	US_PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2008/05/24 13:50
S38	295311	speaker	US_PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2008/05/24 13:50

S39	11322	S37 and S38	US_PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2008/05/24 13:50
S40	2362	S39 and diaphragm	US_PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2008/05/24 13:50
S41	117776	resonan\$ with (different multiple plural plurality two second)	US_PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2008/05/24 13:50
S42	1013	S39 and S41	US_PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2008/05/24 13:50
S43	707	S39 and ((beam arm) with support\$3)	US_PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2008/05/24 13:50
S44	848	(piezo\$ near (laminate \$1 stack\$2)) with (large \$1 increas\$3)	US_PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2008/05/24 13:50
S45	1198	310/330,345.ccls.	US_PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2008/05/24 13:50
S46	25	(US-20050248235-\$ or US-20020149296-\$ or US-20020030421-\$ or US-20020186860-\$ or US-20040125472-\$ or US-20070200467-\$ or US-20030011282-\$ or US-20020014816-\$ or US-20010004180-\$ or US-20060159295-\$ or US-20060238079-\$). did. or (US-6624551-\$ or US-6584660-\$ or US-6396196-\$ or US- 6359370-\$ or US- 6865785-\$ or US- 6453050-\$ or US- 4140936-\$ or US-	US_PGPUB; USPAT; USOCR; JPO	OR	ON	2009/06/14 09:27

		5371428-\$ or US-6472797-\$ or US-5856956-\$ or US-7067965-\$).did. or (US-2269403-\$).did. or (JP-61050413-\$ or JP-2007281669-\$).did.				
S47	14	S46 and resin	US_PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/06/14 09:27
S48	2625	310/311.ccls.	US_PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/06/14 09:50
S49	2243	310/322,334.ccls.	US_PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/06/14 09:50
S50	2859	310/328.ccls.	US_PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/06/14 09:50
S51	865	310/321.ccls.	US_PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/06/14 09:51
S52	742	310/324.ccls.	US_PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/06/14 09:51
S53	322494	piezo\$	US_PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/06/14 09:51
S54	339453	speaker	US_PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/06/14 09:51

S55	12895	S53 and S54	US_PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/06/14 09:51
S56	2591	S55 and diaphragm	US_PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/06/14 09:51
S57	128065	resonan\$ with (different multiple plural plurality two second)	US_PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/06/14 09:51
S58	1149	S55 and S57	US_PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/06/14 09:51
S59	824	S55 and ((beam arm) with support\$3)	US_PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/06/14 09:51
S60	986	(piezo\$ near (laminate \$1 stack\$2)) with (large \$1 increas\$3)	US_PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/06/14 09:51
S61	1243	310/330,345.ccls.	US_PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/06/14 09:51
S62	422	((onishi near2 yasuharu) (sasaki near2 yasuhiro) (toki near2 nozomi)).in.	US_PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/06/14 14:22
S63	62	S53 and S62	US_PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/06/14 14:22
S64	921	(S50 S52 S61) and resin	US_PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/06/14 16:25

S65	1083	(S50 S52 S61) and (epoxy acrylic polyimide polycarbonate)	US_PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/06/14 20:27
S66	39	(US-20050248235-\$ or US-20020149296-\$ or US-20020030421-\$ or US-20020186860-\$ or US-20040125472-\$ or US-20070200467-\$ or US-20030011282-\$ or US-20020014816-\$ or US-20010004180-\$ or US-20060159295-\$ or US-20060238079-\$ or US-20090096326-\$ or US-20080212959-\$ or US-20090034776-\$ or US-20080260187-\$ or US-20060006763-\$). did. or (US-6624551-\$ or US-6584660-\$ or US-6396196-\$ or US-6359370-\$ or US-6865785-\$ or US-6453050-\$ or US-4140936-\$ or US-5371428-\$ or US-6472797-\$ or US-5856956-\$ or US-7067965-\$ or US-5118981-\$ or US-4868446-\$ or US-7538476-\$ or US-7446459-\$ or US-7038356-\$ or US-6806621-\$ or US-5339290-\$). did. or (US-2269403-\$ or US-3360664-\$). did. or (JP-61050413-\$ or JP-2007281669-\$ or JP-59210797-\$). did.	US_PGPUB; USPAT; USOCR; JPO	OR	ON	2009/06/15 07:27
S67	3190212	resin epoxy acrylic polyimide polycarbonate	US_PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/06/15 07:27
S68	30	S66 and S67	US_PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/06/15 07:27

S69	478	310/800.ccls.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/06/15 07:31
S70	889	310/321.ccls.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/11/23 15:25
S71	1265	310/330,345.ccls.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/11/23 15:25
S72	2672	310/311.ccls.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/11/23 15:25
S73	2276	310/322,334.ccls.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/11/23 15:25
S74	2918	310/328.ccls.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/11/23 15:26
S75	889	310/321.ccls.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/11/23 15:26
S76	764	310/324.ccls.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/11/23 15:26
S77	333031	piezo\$	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/11/23 15:26
S78	357136	speaker	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/11/23 15:26

S79	13671	S77 and S78	US_PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/11/23 15:26
S80	2729	S79 and diaphragm	US_PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/11/23 15:26
S81	132318	resonan\$ with (different multiple plural plurality two second)	US_PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/11/23 15:26
S82	1195	S79 and S81	US_PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/11/23 15:26
S83	887	S79 and ((beam arm) with support\$3)	US_PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/11/23 15:26
S84	1038	(piezo\$ near (laminate \$1 stack\$2)) with (large \$1 increas\$3)	US_PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/11/23 15:26
S85	1265	310/330,345.ccls.	US_PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/11/23 15:26
S86	429	((onishi near2 yasuharu) (sasaki near2 yasuhiro) (toki near2 nozomi)).in.	US_PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/11/23 15:27
S87	333031	piezo\$	US_PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/11/23 15:27
S88	63	S87 and S86	US_PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/11/23 15:27

S89	2918	310/328.ccls.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/11/23 15:27
S90	764	310/324.ccls.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/11/23 15:27
S91	1265	310/330,345.ccls.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/11/23 15:27
S92	943	(S89 S90 S91) and resin	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/11/23 15:27
S93	1111	(S89 S90 S91) and (epoxy acrylic polyimide polycarbonate)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/11/23 15:28
S94	486	310/800.ccls.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/11/23 15:28
S95	39	(US-20050248235-\$ or US-20020149296-\$ or US-20020030421-\$ or US-20020186860-\$ or US-20040125472-\$ or US-20070200467-\$ or US-20030011282-\$ or US-20020014816-\$ or US-20010004180-\$ or US-20060159295-\$ or US-20060238079-\$ or US-20090096326-\$ or US-20080212959-\$ or US-20090034776-\$ or US-20080260187-\$ or US-20060006763-\$). did. or (US-6624551-\$ or US-6584660-\$ or US-6396196-\$ or US- 6359370-\$ or US- 6865785-\$ or US- 6453050-\$ or US- 4140936-\$ or US-	US-PGPUB; USPAT; USOCR; JPO	OR	ON	2009/11/23 15:28

		5371428-\$ or US-6472797-\$ or US-5856956-\$ or US-7067965-\$ or US-5118981-\$ or US-4868446-\$ or US-7538476-\$ or US-7446459-\$ or US-7038356-\$ or US-6806621-\$ or US-5339290-\$).did. or (US-2269403-\$ or US-3360664-\$).did. or (JP-61050413-\$ or JP-2007281669-\$ or JP-59210797-\$).did.				
S96	3265578	resin epoxy acrylic polyimide polycarbonate	US_PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/11/23 15:28
S97	30	S95 and S96	US_PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/11/23 15:28

**EAST Search History (Interference)**

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
S98	49	(piezo\$ and ((beam arm) with support \$3) and resin).clm.	US_PGPUB; USPAT; UPAD	OR	ON	2009/11/27 16:56
S99	769	(piezo\$ and ((beam arm) with support \$3) and (actuator vibrat\$3)).clm.	US_PGPUB; USPAT; UPAD	OR	ON	2009/11/27 16:57

11/27/2009 5:34:29 PM

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